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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,647	09/08/2003	Dale Nelson	25648-456701	2838
27717	7590	04/19/2005	EXAMINER	
SEYFARTH SHAW 55 EAST MONROE STREET SUITE 4200 CHICAGO, IL 60603-5803			NGUYEN, CAMTU TRAN	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Response to Amendment

This Office Action is in response to applicant's amendment filed on March 3, 2005.

Claims 1-6 have been amended. Claims 10-13 are newly added. Claims 2, 3 and 12 have been withdrawn from consideration since they are drawn to a different embodiment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chia et al (U.S. Patent No. 5,913,856). Chia et al discloses in Figure 1 a catheter system comprising a shaft (1) having a distal tip section (6), distal end (2), a steering mechanism (5). Figure 2 details the distal end section (6) comprising a flexible porous shaft (21), a band electrode, and a tip electrode (11). With regards to the porous tip, as recited, Chia et al discloses in Figure 3 another embodiment comprising a tip electrode (15) with a permeable surface (column 5 lines 47-56). Therefore it would have been obvious to one skilled in the art to modify the tip electrode (1) to be permeable as such would allow fluid communication from inside the shaft over the exterior surface of the electrode to provide a fluid protective layer surrounding the electrode to minimize temperature elevation to the electrode with biological tissues. Chia et al discloses the steering

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mechanism (5) at handle (4) comprises means for providing a plurality of deflectable curves on the distal tip section (6) of the catheter. With regards to claim 4, Chia et al does not disclose the steering mechanism having at least one pull wire but this type of steering mechanism is not new in art of catheter for maneuvering the catheter, in fact it is very common to use a pull wire to steer the catheter. Therefore it would have been obvious to recognize the pull wire is one of many ways to which an ordinary skill in the art would use to steer/articulate/manipulate the device.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chia et al (U.S. Patent No. 5,913,856) in view of Maguire et al (U.S. Patent No. 5,755,760). Chia et al, as presented above, discloses in Figures 1-3 a catheter system comprising elements recited in these claims but does not teach a guiding catheter, as recited. Maguire et al discloses in Figure 2 a deflectable guiding catheter (32) receiving an ablation catheter (42), the deflectable guiding catheter comprising a knob (36) by way of which deflection of the distal tip of the guide catheter (32) is accomplished by longitudinal displacement of an internal tension wire (column 4 lines 15-41). Therefore it would have been obvious to one skilled in the art to employ the Chia et al's catheter system in conjunction with Maguire et al's deflection guide catheter as such would provide directional control of the catheter and/or facilitating placement of the ablation electrode(s) at a desired location.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chia et al (U.S. Patent No. 5,913,856) in view of Maguire et al (U.S. Patent No. 5,913,854). Chia et al, as presented above, discloses in Figures 1-3 a catheter system comprising elements recited in these claims but does not teach the electrode comprises a tubular array of conductive metal strands, as

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recited. Maguire et al teaches the linear ablation electrode is typically a series of circular band electrodes, one or more spiral electrodes or one or more braided electrodes, of which one or more braided electrodes inherently contains by a tubular array of conductive strands. Therefore one skilled in the art would have utilized the Maguire et al's arrangement for electrodes as such would provide a stronger conductive field.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chia et al (U.S. Patent No. 5,913,856) in view of Brucker et al (U.S. Patent No. 5,643,197). Chia et al, as presented above, discloses in Figures 1-3 a catheter system comprising elements recited in these claims but does not teach the electrode comprises a tubular array of conductive metal strands, as recited. Brucker et al discloses in Figures 1-16 an ablation catheter comprising a catheter (20), ring electrodes, and a porous tip (26). Figure 16 illustrates elongated electrodes (90) and these electrodes preferably constructed from a porous or microporous mesh (91) woven from small diameter metallic threads (column 8 lines 8-15). Therefore it would have been obvious to one of ordinary skill in the art during the time of the invention to use Brucker et al's electrodes as such would deeper linear lesions along body tissues.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chia et al (U.S. Patent No. 5,913,856) in view of Brucker et al (U.S. Patent No. 5,643,197) and further in view of Maguire et al (U.S. Patent No. 5,755,760). Chia et al discloses in Figure 1 a catheter system comprising a shaft (1) having a distal tip section (6), distal end (2), a steering mechanism (5). Figure 2 details the distal end section (6) comprising a flexible porous shaft (21), a band electrode, and a tip electrode (11). With regards to the porous tip, as recited, Chia et al discloses in Figure 3 another embodiment comprising a tip electrode (15) with a permeable surface

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(column 5 lines 47-56). The Chia et al does not teach (a) the band electrode comprising a tubular array of conductive metal strands and (b) a guiding catheter. Brucker et al discloses in Figures 1-16 an ablation catheter comprising a catheter (20), ring electrodes, and a porous tip (26). Figure 16 illustrates elongated electrodes (90) and these electrodes preferably constructed from a porous or microporous mesh (91) woven from small diameter metallic threads (column 8 lines 8-15). Therefore it would have been obvious to one of ordinary skill in the art during the time of the invention to use Brucker et al's electrodes as such would deeper linear lesions along body tissues. Maguire et al discloses in Figure 2 a deflectable guiding catheter (32) receiving an ablation catheter (42), the deflectable guiding catheter comprising a knob (36) by way of which deflection of the distal tip of the guide catheter (32) is accomplished by longitudinal displacement of an internal tension wire (column 4 lines 15-41). Therefore it would have been obvious to one skilled in the art to employ the Chia et al's catheter system in conjunction with Maguire et al's deflection guide catheter as such would provide directional control of the catheter and/or facilitating placement of the ablation electrode(s) at a desired location.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camtu T. Nguyen whose telephone number is 703-305-0537.

The examiner can normally be reached on (M-F) 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett can be reached on 703-308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Camtu Nguyen
April 4, 2005



Henry A. Bennett
Supervisory Patent Examiner
Group 3700